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Conservation Comm Minutes 01-18-2001

MINUTES, JAN. 18, 2001

Mr. Stevens called the meeting to order at 7:30pm in the main hall of Town Hall.

Present were Corinna Beckwith, Nathaniel Stevens, Timothy Sullivan, David White and John Roche of the Commission. Richard Bento, Director of Public Works, and Chad Cox and Peter Baril of GZA were present for the Arlington Reservoir project. Alan McClennen, Director and Kevin O'Brien, Assistant Director of the Planning and Community Development Department were present for the Reed's Brook and 36 Wright Street projects as well as the Mugar hearing. Ingeborg Hegemann, BSC Consultants, was in attendance representing the Conservation Commission along with David Albrecht, Rizzo Associates, representing the owners of the Mugar parcel. Also present for the Mugar hearing were George Laite, Ann LeRoyer, Karsten Hartel, Clifford Larson, Bob Shatten, Marjorie Noone, and Aram Holliman.

7:30pm - MISCELLANEOUS

The <u>MACC annual conference</u> is the weekend of March 3. Each member can sign up individually then we can reimburse you for the money from the Education account.

Mr. Roche was sworn in by the Town Clerk.

Mr. White reported that the Open space plan is being worked on,the Open Space annual report is going out tomorrow.

He also reported that the <u>Muzzioli encroachment on the bikepath</u> is under negotiation. Ann is trying to raise issue to Selectmen, but it is under litigation..

Mr. Stevens solicited participation on an <u>ACEC committee</u>. Ms. Beckwith volunteered. The Arlington Land Trust is meeting on Monday, January 22.

7:45pm- REED'S BROOK LANDFILL, AMENDMENT TO NOTICE OF INTENT-

Mr. O'Brien presented an update on the project. The Lexington Conservation Commission issued its Order of Conditions. The replication area next to the detention pond will be changed to approximately 4000 sf. The northeast wetland will be restored as mitigation for filling the two roadside wetlands near Summer St. Mr. O'Brien asked the Commission if they have a preferred method for the removal of Phragmites.

Our only response was to look to the previously permitted Meadow Brook park restoration project. A combination of methods is the currently accepted. There is a new publication out from the US. Fish and Wildlife Service.

Ms. Beckwith made a motion to continue the hearing to 7:45pm on February 15/Mr. White seconded the motion. The vote to approve was unanimous.

8pm- 36 WRIGHT ST, NOTICE OF INTENT, CONT.-

Mr. O'Brien presented changes to this project that consist of moving the house along a route to near Wright St. that will avoid two large trees. The new route will however require the removal and trimming of smaller trees along the way. The back yard of the new house lot will also be reworked. This will result in 1075 square feet filling of 100 year flood

plain. The compensatory flood storage area (1150 sf.) is proposed for a location near the adjacent wetland, close to where the house is now located. At this location, there is a drain pipe that takes flood water from the wetland. This pipe will be shortened during the Reed's Brook development and therefore the area is already to be disturbed. The site will be checked for existing vegetation. Where the pipe is removed, the area will be left as a swale. The compensatory flood storage area will be approximately 1 foot deep.

Mr. who lives adjacent to the property commented on the entire drainage system and the moving of the house.

Mr. O'Brien described the effort to remove as few trees as possible. The house lot will get an infiltrating driveway and a fence. The trees are in poor shape due to excessive flooding over the past 10 years. The Tree Warden will be called to assess the condition of the trees. The Reed's Brook project should be done next Fall while the house moving should be done in the Spring.

Ms. Beckwith suggested including the landscaping plan for the house lot in the tree compensation plan.

The Commission discussed the permits for both this and the Reed's Brook project and how they would be linked.

Mr. Roche made a motion to issue an Order of Conditions that include the above discussed matters/Ms. Beckwith seconded the motion. The vote to approve the motion was unanimous.

8:15pm ARLINGTON RESERVOIR, NOTICE OF INTENT FOR GEOTECHNICAL BORING AND TEST PITS

Mr. Bento and the consultants presented the project which is required in order to remedy problems with the dam at the Arlington Reservoir. Mr. Baril and Mr. Cox described the use of the drill machinery and routes of access. The work is to include approximately 10 borings (9 of which will have observation wells installed) and 5-6 test pits along the embankments and in the beach area. The wells will have flush mounted caps so they will not be an obstruction. The truck used on the beach and its embankment will be tracked, not with wheels, in order to disturb the substrate as little as possible.

The test pits are to determine the presence of non-structural fill along the berm. The pits will be approximately 4-5 feet wide and up to 15 feet deep, characterized immediately and filled back in within the same day.

A spill prevention and clean up plan was included in the Notice of Intent. An absorbant material is brought on site for any spill of oil or gas. Haybales will be brought on site and used when and if neccessary.

The consultant also included a very detailed poster of the work to be affixed to an orange WORK AHEAD sign. Mr. White requested locating an additional sign on the path from the fields to the south of the Reservoir.

Ms. Beckwith asked where they anticipated minor clearing of vegetation. Mr. Cox thought that the only location where that might be necessary would be along the embankment to the beach area.

The rigs and machinery will be left on site in the parking area near Lowell Street. The Commission will require that the machines be parked overnight outside of the Buffer Zone.

The work is scheduled to start the week of January 22.

Mr. Roche made a motion to issue an Order of Conditions/Ms. Beckwith seconded the motion. The vote to approve the motion was unanimous.

8:30pm MUGAR PARCEL, ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION, CONT.

Mr. Stevens opened the continued hearing. We discussed the submittals of memos from the drainage consultant hired by the Commission. Mr. Warren Bathege of BSC Consultants.

Mr. Albrecht responded to these memos and an additional memo of questions from Mr. White of the Commission.

Mr. Albrecht submitted an additional survey plan. The source is the map used for CDM in 1982 to conduct the FEMA study. Rizzo believes that the railroad tracks were removed and his analysis of the map concludes that the connection to Alewife Brook below Route 2 is unobstructed across Thorndike field.

Mr. Albrecht stated that FEMA reports three different numbers: 8.1 feet on the table, 8.2 feet scaled from the profile and 8.0 feet from the map.

Mr. Albrecht stated the Mugar parcel is not substantially flooded through the culverts from the Little River. The easternmost culvert only drains to the parking lot of the Arthur D. Little Property.

Ms. Beckwith asked if any regrading was done along the bikepath in this area to construct the path. Ms. Hegemann asked Rizzo to provide new topography of the path to confirm the argument of the hydrologic connection. Rizzo was not able to provide the information at this hearing.

Ms. Beckwith displayed another map from Elsie Fiore showing elevations accross Thorndike field, along the bikepath and to the Alewife.

Mr. McClennan reported that the railroad tracks were not on balast in this location and that they were only on gravel. The tracks were removed prior to 1982 in order to construct the Tail Track project for the Alewife T station.

Ms. Beckwith asked what are the criteria for selecting one reach of waterway over another when a large parcel is connected to both. Why not select the higher of the two flood elevations?

Mr. Albrecht responded that the Little River drainage basin is smaller than that for the Alewife. The connection across Thorndike field is open and unrestricted to the Alewife whereas the Little River must get through culverts in order to flood the parcel.

Mr. Albrecht discussed the photograph submitted by Jennifer Griffith at the intersection of Margaret and Edith Streets of the 1996 storm. His conclusion that the flood elevation shown is at 6.8 feet.

Mr. Aram Holliman asked what was the severity of the 1996 flood, was it a hundred year storm? Mr. Albrecht answered that the Technical Paper 40 was used to analyse the storm and while the rainfall exceeded the 100 year amount, the discharge was slightly under the 100 year amount, so the Army Corps of Engineers declared that the storm was a 100 year event.

Mr. Holliman asked how two 100 year storms can occur within 2 years of each other? Are the predictabilities, the statistics accurate? Mr. Albrecht answered that it is possible to get a 100 year event every week and that is the nature of statistical probabilities.

Mr. McClennan commented that at Reed's Brook, the Planning Department found that the 1996 storm was only a 60 year event. Mr. Albrecht thinks that it is far enough away to have experienced a separate amount of rainfall. Mr. Albrecht said that he could supply us with the Army Corp's report.

Mr. Holliman gave his opinion that he considers the report from BSC to be full of speculation and supposition. Mr. Albrecht restated that he stands by the opinion of his firm that the 100 year elevation is 8.0 feet, based upon the best available information. A new flood study would cost on the order of \$250,000 and would be prohibitive for this project.

Ms. Beckwith asked if Rizzo or BSC had contacted SEA Consultants who have been hired by the Cambridge Department of Public Works to evaluate the hydrology of the combined sewer separation project. Ms. Beckwith presented information from a slide presentation of that project which showed data from a reconstituted model based upon the FEMA model of 1982. SEA had collected new cross sections of the Little River and Alewife and presented an adjustment factor to be added to the elevations from the 1982 study. Ms. Beckwith asked if this adjustment factor should be added to the 100 year data that we are now considering.

Ms. Beckwith asked if a new study is warranted. Ms. Hegemann stated yes and that many factors in the field have changed since the study had been done. Mr. Batheage's memo recommends that we require Rizzo to provide information neccessary to support the request for a Map Change from FEMA when we issue our permit for this ANRAD.

Mr. Shatton asked to what extent are new construction since 1982 considered in the numbers being considered tonite? He also asked how any changes in the outfall from Spy Pond may change the hydrology of this project. Mr. Albrecht acknowledged that any new impervious area would increase the flood elevations, however, he is not aware of any other large new developments in the immediate area in Arlington. Mr. Shatton asked when was the Alewife T parking lot built. Mr. McClennan answered that the T was built in 1982-1984. Mr. Holliman stated that he thinks that there was no floodplain compensation for the T building.

Mr. Holliman stated that it seems that the FEMA study is obsolete and asked if anyone agrees with this statement. Mr. Albrecht stated his support for the FEMA study. Ms. Beckwith stated that she doesn't have confidence in any statement supporting or denying the FEMA elevations. Ms. Hegemann summarized that the most conservative number on the FEMA study is the 8.2 elevation, the table shows 8.1 and the map shows 8.0 feet.

Mr. Stevens asked what do the regulations from the Wetlands Protection Act state specifically is the required information from the FEMA maps?

Mr. Holliman stated that Route 2 floods over the top of the road surface during high floods. What is the difference in the area covered between the elevation of 8.0 and 8.2 on the site? It only makes for a difference of a little over 2 inches.

Mr. Albrecht, responded that on a flat site, like the Mugar parcel, this could change the area substantially.

Mr. Albrecht responded to the question of what are the consequences of raising Thorndike field 18 inches. Mr. Albrecht answered that the impact to the floodplain would be substantial without flood storage compensation.

Mr. Abrecht responded to the question regarding the Cambridge CSO separation project. Mr. Albrecht spoke with SEA last week and they stated that they are still evaluating the impacts to the flood plain if any.

Mr. Albrecht responded to a question on using the Cornell method for hydrologic information. He stated that the method is too conservative (it sets the 100 year storm at 2 inches more than TP-40) and is not an accepted method by MassHighway and DEP.

Mr. Holliman stated that SEA reported that the water level of Alewife Brook would be raised less than an inch (0.7 inch) during the 10 year storm when the Cambridge CSO separation is constructed with a retention pond in the Alewife Reservation.

Ms. Hegemann stated her firm's recommendations: 1) while a regional study should be conducted, it should be initiated by the Town and the Conservation Commission should require the supporting information from Rizzo (topography, invert elevations, spot elevations, Route 2 elevations), 2) if the Commission chooses elevation 8.0 then new survey information of the bikepath should be submitted by Rizzo, 3) the Commission could select 8.2 elevation as the most conservative number that exists in the FEMA study.

Mr. Laite asked the Commission to keep the hearing open in order to consider the impact of the Cambridge CSO project and allow for more review by the residents of the presented information.

Mr. Albrecht said that the neighborhood survey information is mostly inconsistent and that some residents have rain gutters turned toward the driveways that then flows into the basement. The opinion of Rizzo is that groundwater is flooding most of these basements and not surface water.

Mr. Albrecht asked that the Commission close the hearing and that a vote be taken tonite. Mr. Albrecht asked who on the Commission has been present for the entire set of meetings. The Commission conferred that only Ms. Beckwith, Mr. White and Mr. Sullivan had been present at all of the meetings. Mr. Stevens had just missed one hearing and he had read the minutes of that hearing. The Commission will check on the validity of Mr. Stevens voting. Mr. Albrecht is concerned about the possibility of an appeal.

The Commission voted to close the hearing but waiting until the next hearing to discuss and vote on the permit. Mr. White made a motion to close the hearing/Mr. Sullivan seconded the motion. The vote to approve the motion was unanimous, with only three Commissioners voting.

Ms. Beckwith stated that she would speak with Alan McClennan to appraise him of the actions at the end of this hearing since he had left the hall earlier.

The discussion and vote will be held February 1 at 8:00pm in the Town Hall.

MISCELLANEOUS, CONT.

The <u>Conservation Land definition</u> for the Planning Department will be emailed to the Commission for review. Mr. McClennan explained that this definition was going to be used for the new Open Space zone. The Commission will review the language and report back to the Planning Department.

The <u>Appalachian Mountain Club</u> is looking for a Trail Stewardship coordinator. Ms. Beckwith has the contact information.

Mr. White made a motion to pay Ms. Beckwith's fee for <u>administrative services</u> for the month of December/Mr. Stevens seconded the motion. The vote to approve the motion was unanimous.

Ms. Beckwith submitted the Annual Report last Friday with revisions from the Commission.

The <u>minutes</u> from the last hearings were distributed. Ms. Beckwith will organize the latest meeting minutes and distribute those which are approved to Bob Sprague to post on the website and to the Commission.

The ENF for the Belmont uplands development project was withdrawn due to the lack of appropriate zoning.

The Commission's annual budget was level funded.

Ms. Beckwith asked to schedule the Commission's <u>holiday party</u> and offered the use of her house. Possible dates will be February 3 and 10 and will be confirmed with Susan Brent and Steve Emsbo-Mattingly.

Ms. Beckwith made a motion to <u>appoint Mr. Stevens to the position of Chair of the Commission</u>/Mr. White seconded the motion. The vote to approve the motion was unanimous. The Commission voted to convene at approximately 10:45pm.

Respectfully submitted, Cori Beckwith, Member and Administrator